App. No. 10/050621
Office Action Dated July 16, 2004
Amd. Dated November 12, 2004

REMARKS

Reconsideration is respectfully requested in view of the following remarks. No new matter has been added. Claims 1-5 are pending.

Claim rejections - 35 U.S.C. § 103

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKenzie, Jr. (US 5,140,745) in view of Minoru (US 5,309,326). For at least the following reasons, applications respectfully traverse the rejection.

Claim 1 is directed to a method of fabricating a multi-layer circuit board assembly. The assembly comprises first and second multi-layer circuit board modules, each of which has a plurality of module interconnect circuit traces formed on an upper surface thereof. A plurality of first and second solder pads are formed on the lateral edges of the first and second multi-layer circuit board modules, respectively, such that, after the second multi-layer circuit board module is stacked on top of the first multi-layer circuit board module, the second solder pads are registered with the first solder pads, and such that, after bonding the second solder pads to the first solder pads, the module interconnect circuit traces of the first and second multilayer-circuit board modules are electrically connected.

McKenzie, Jr. teaches a plastic leadless chip carrier (PLCC) socket pin grid array (PGA) header adaptor (Fig. 10). The lower or bottom board (102) is formed so as to include a plurality of side edge traces (106). The second board (104) is free from such traces and includes a pin array (108) on the upper surface thereof. The boards (102) and (104) are secured together with a screw (114). An O-ring (116) is mounted between the boards to insure that the only electrical connection between the boards is provided by the

male-female connections, thus through pins (112) and corresponding clips (col. 4, ll. 22-44). McKenzie, Jr. teaches away from the claimed invention by disclosing a second board is free from side edge traces. Furthermore, McKenzie, Jr. fails to teach or suggest the forming of first and second solder pads on the lateral edges of the first and second multi-layer circuit board modules, respectively. The second multi-layer circuit board module is stacked on top of the first multi-layer circuit board module, the second lower surface being superimposed on the first upper layer surface, such that the second solder pads are registered with the first solder pads, respectively.

Minoru teaches a circuit module comprising a chip-carrying circuit board 20 mounted on the surface of a circuit board 21. After stacking the circuit board 20 on the circuit board 21 in the center area of the latter, a wiring pattern 27 on the circuit board 20 is connected electrically to a wiring patter 27 formed around the center area of the circuit board 21. Minoru also fails to teach or suggest the forming of first and second solder pads on the lateral edges of the first and second multi-layer circuit board modules, respectively. The second multi-layer circuit board module is stacked on top of the first multi-layer circuit board module, the second lower surface being superimposed on the first upper layer surface, such that the second solder pads are registered with the first solder pads, respectively. Minoru does not remedy the deficiency of McKenzie, Jr.

Thus, neither McKenzie, Jr. nor Minoru, alone or in combination, render claim 1 obvious. It is therefore applicants belief that claim 1 is allowable over the cited references for at least the above-cited reasons. Insofar as claims 2-5 depend from claim 1, it is applicants belief that those claims are also allowable. Applicants do not concede the correctness of the rejection. Withdrawal of the rejection is respectfully requested.

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In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions or concerns regarding this communication can be directed to the undersigned attorney, Michael D. Schumann, Reg. No. 30,422, at (612) 336.4638.

Respectfully submitted,

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Dated: November 12, 2004

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